Notebook Series -- Notebooks by Edison
Notebook, N-20-01-27

This notebook is a continuation of N-19-12-06. It was used by Edison in January 1920 for notes pertaining to ongoing electroplating experiments performed with various numbered electrolytic and chemical preparations. In many cases, Edison described the condition of the plating on successive runs, sometimes in various plating baths. The front cover is labeled "No 8 General Book Jany 23 1920." The pages are unnumbered. Approximately 20 pages have been used.

Jany 27 1920

8/4 Selenium Acid sticks much better to Nickel than Copper No strip 001 blackened by 8/4 Can be bent at sharpest right angle with Cracking But if an too dark it rubs off.

Can go to full red

553 Daughters

1 all cracked up

554 Doughboy

1, 2 & 3 all cracked up

4 = Contains some Nickel
Sulfite — This is metal
Curled up bad & very brittle

5 = Improved but powdery & dark

6 ditto.

7 ditto improving — brittle

8 "

9 improving but powders up

11 Very bad

12 "

13 Bad, red, powdery, not cracked

14 Bad.

15 Very bad

16 Bad.

17

18 All blue & Very bad

19

20

24 — ok
25 ok
26 ok 2 cor
27 all
28 ok thick.
29 Cracked
30 "
31 "
32 "
33 "

1 hour 300 MA

555 3rd Cryoglin [illegible]
will add 1 Milg NaCl after
slips ok
1 all cracked up
2 fair
3 ok
4 ok
5 ok 2 cor very slight
6 ok 1 cor
7 ok — thin.
8 ok —
9 ok
10 ok "
11 ok
We now add Salt
12 ok — salt added 1 Milg
13 ok
14 ok points
15 ok "
16 ok
17 ok
18 ok
19 Sieve
Added 5 [illegible] grams NaCl
21 — ok points
22 Sieve
23 ok but 1/2 Slip Curled away

25 = OK 1 Cor
26 OK good amount efficiency
27 OK
28 OK 1 Cor
29 OK 1 Cor
30 OK 1 Cor
31 OK 2 Cor thick
32 Cracked bad
33 " "
34 " "
35 " Very bad
36 " " self sloughing

556 – Same as 555
but after OK well wet filter paper 1½ hours then removed
1 – all cracked up
2 – fair
3 – OK
4 OK
5 OK 1 cor amount
6 OK 1 cor "
7 OK thin
8 OK
9 OK
10 OK "
11 OK

We now add filter paper 1½ hour
12 OK 3 holes
13 OK
14 OK – Very clean & bright,
15 OK " thin
16 OK
18
19 OK
20
21 OK

Added 3 grms NaCl
23 OK
24 OK

Dan Yan has succeeded in taking solid KOH from Niagara Falls Containing 2.20% KCl – with one crystalization he got it down to 0.5% salts by 2nd Crystn Cancaget it down to 0.20% KCl, will figure out a plant.

558 = 125 cc of 553 taken &
125 cc 554

Some H_2S gas passed to take up the free Oxygen, some filter paper added & then rolled up & filtered

1 = All cracked up -
2 Bright but Curled up
3 ok — bright, some holes
4 ok " " Then
5 ok "
6 ok "
7 ok "
8 ok "
9 ok —
10 Sieves
11 Sieves
12 ok — , blisters!

CO

Copper

559 $CuSO_4$ 2nd Crystn. 250 cc
20 gms $ZnSO_4$

1 = smooth
3 fairly smooth; not thick
4 smooth. thin - 3 cc H_2O/H_2SO_4

Copper

560 250cc sat $CuSO_4$
25 grms $ZnSO_4$

1 Smooth

3 Nearly smooth / Much better than 559

4 Very smooth / Much better than 559 - 3cc H_2SO_4 used

This is good!

Copper

561 250 cc 2nd Crystn $CuSO_4$
35 grms. $ZnSO_4$

1 smooth

3 Smooth + better than 559 or 560
Thickest of all

4 Very warty. 3cc 20% H_2SO_4

562 - 250 cc 2nd Crystln Cu SO4
50 grms Zn SO4

1 Smooth
3 smooth. thinner than 561

4 Very Warty - worst.
3 cc H_2SO_4 acid.

559 to 562 — Only 560 is thick & good.

Copper

563 - 250 cc 2nd Crystn $CuSO_4$
75 grms - $ZnSO_4$ -

1 Smooth
3 Considerable Warts,
+ much thinner than others
nearly like 559

566 - 250 cc. $CuSO_4$ 3rd Crystin
no acid

1 Hour 500 ma —

1 = OK soft fine cryst
2 = OK Stiff, stripes harder

3 OK — 2 Hours
4 OK fine nearly Edge -
5 OK " worse

7 OK 4 Hours
8 OK - Considerable Nubs at Edge

See 570

567 250cc Cubay. 4th Crystal
no acid

1 Hour 500 ma

1 — ok soft
2 = ok stiffer stripe harder

3 ok — 2 Hours
4 ok fine wavy Edge less than 566
5 ok. "

4 hours
7 ok
8 ok
see 570

568 200 cc $CuSO_4$ 5 lb Graphite
no acid

1 Hour 500 ma

1 — ok soft

2 = ok harder — chips harder

3 ok from wearing edge 2 hours

4 "

5 " more, less than 67

7 ok 4 hours

8 ok

see 570

569 - 250 cc CuSO4 6th Crystals
no acid.

1 Hour 500 ma.

1 ok soft

2 ok harder, strips harder

2 Hour

3 ok

4 Scarcely any warty Edges

5 "

4 Hours

7 ok

8 ok

to

13 — see 5 yds

570 250 cc $CuSO_4$ 7th Crystals
no acid

1 Hour 500 ma –

1 – ok soft – 566 to 570 all same size Crys

2 ok harder – strips harder, Crystals

3 ok ~ 2 Hours –
of 66 To 70 There is best at edges
scarcely a sign of warts, considerable
on 566 – Crystals of Cu about the
same ~ to 1/8 of width of groove

4 OK no warty Edges small Crystals
5 ok " " almost

All of this series very soft now
Come off harder than Nickel. 570 ;
Exceedingly hard to start Tearing.
yet 566 Easy to Tear –

4 Hour

7 Edge much less nubs than 566 –
8 " Very much less than 566

It is remarkable how much
570 Resists tear compared
to 566

9 = 566 most nubs 570 least

570 Continued

10th O/K 4 hours 1/2 amp
all about same as 2 hours
rubs at Edges about same as 2 hours
+ about same as 566 as 570

11 = 1 hour 1 amp much more
rubs at Edges -

12 2 amp 1 hour very bad
rubs all Edges, thin + generally
Not good

4 Hours at 1/2 amp is limit
which is present disc rate

13 - Run 1/2 amp 15 hours
566 most rubs at Edge but
567 - is about as good as 570
566 thinnest - 570 is only one
Can see Music on back
fine crystals.